



ALAMEDA COUNTY TRANSPORTATION COMMISSION

Countywide Multimodal Arterial Plan

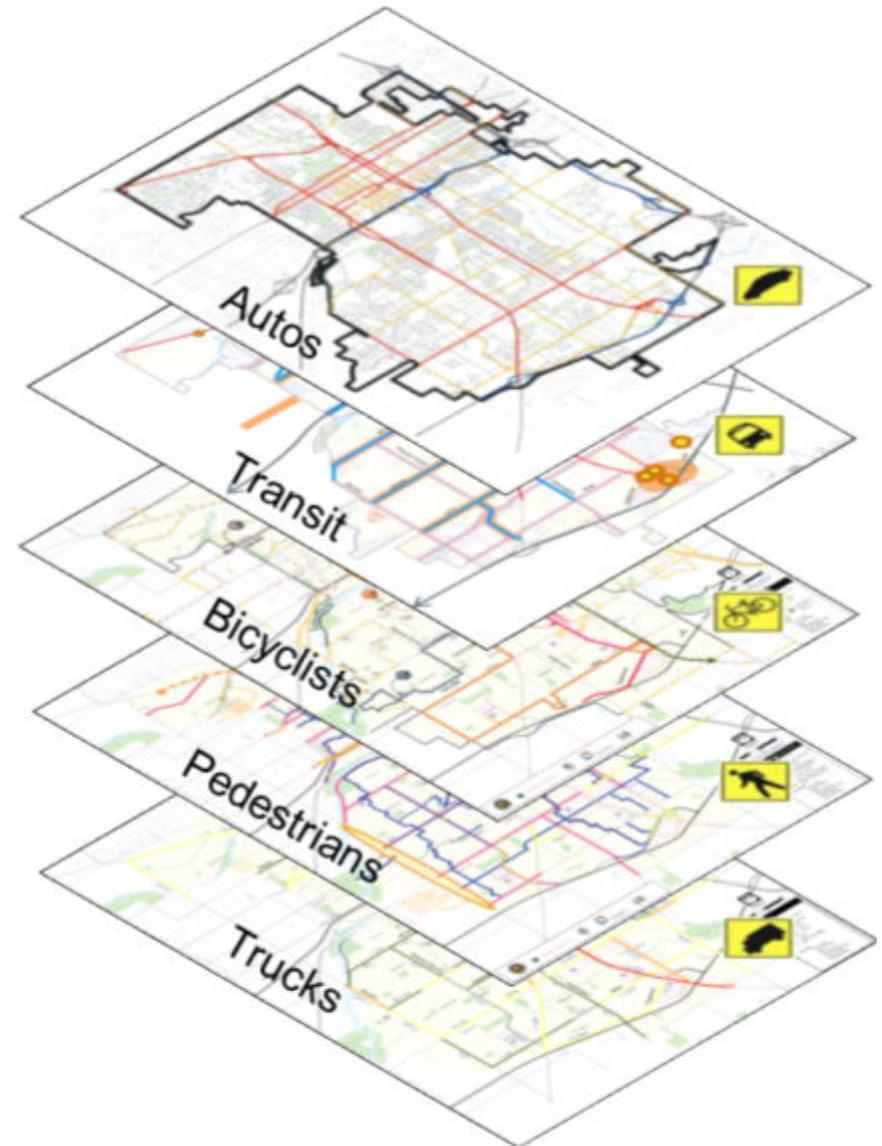
Improving multimodal mobility for better
economic, health and environmental
outcomes



Arterial Operations Committee September 23rd, 2014 Meeting
Francisco Martin, Fehr & Peers
September 23, 2014

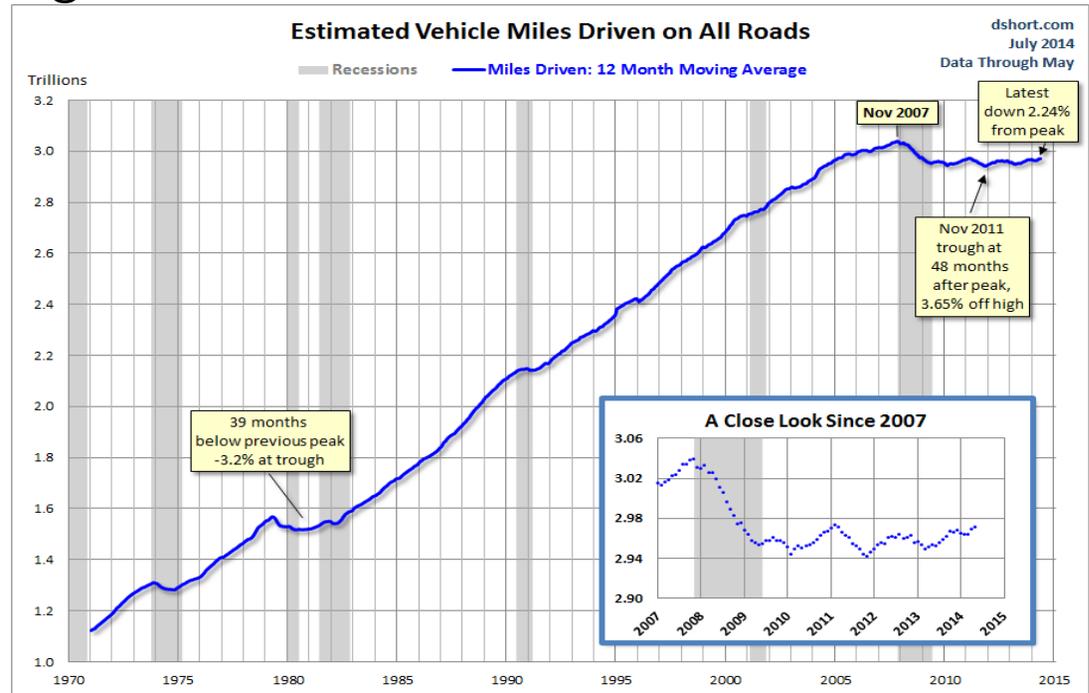
Project Success

- Jurisdiction/partner agency participation and buy-in
- Coordination with:
 - Countywide Transit Plan
 - Goods Movement Plan
- Reliable macro-level analysis



Project Design Framework

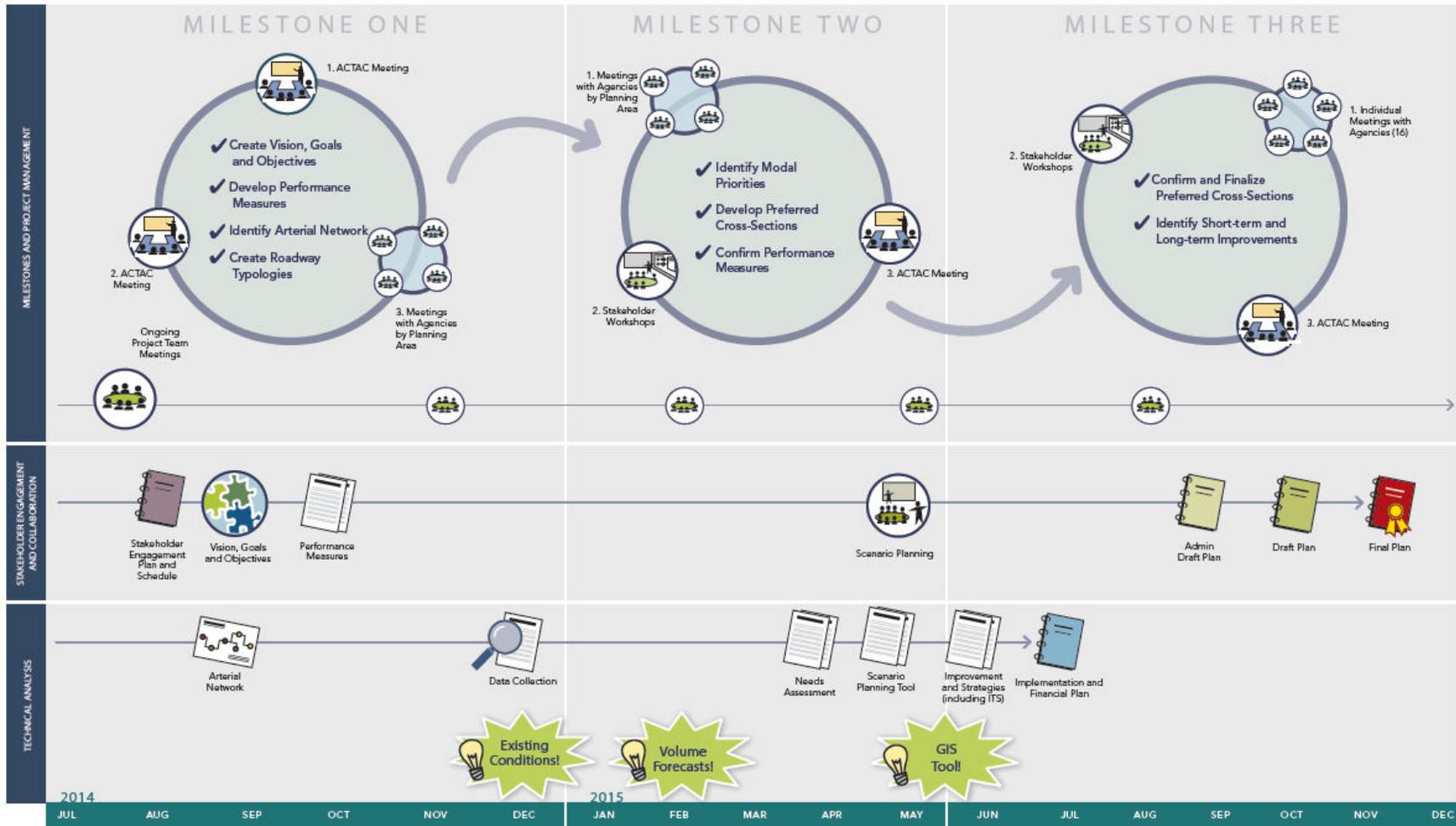
- Stakeholder Engagement Plan
- Identify Arterial Network
- Data Collection Plan
- Travel Demand Forecasting White Paper
- Roadway Typologies
- GIS Cross-Sectional Tool
 - Proof of Concept



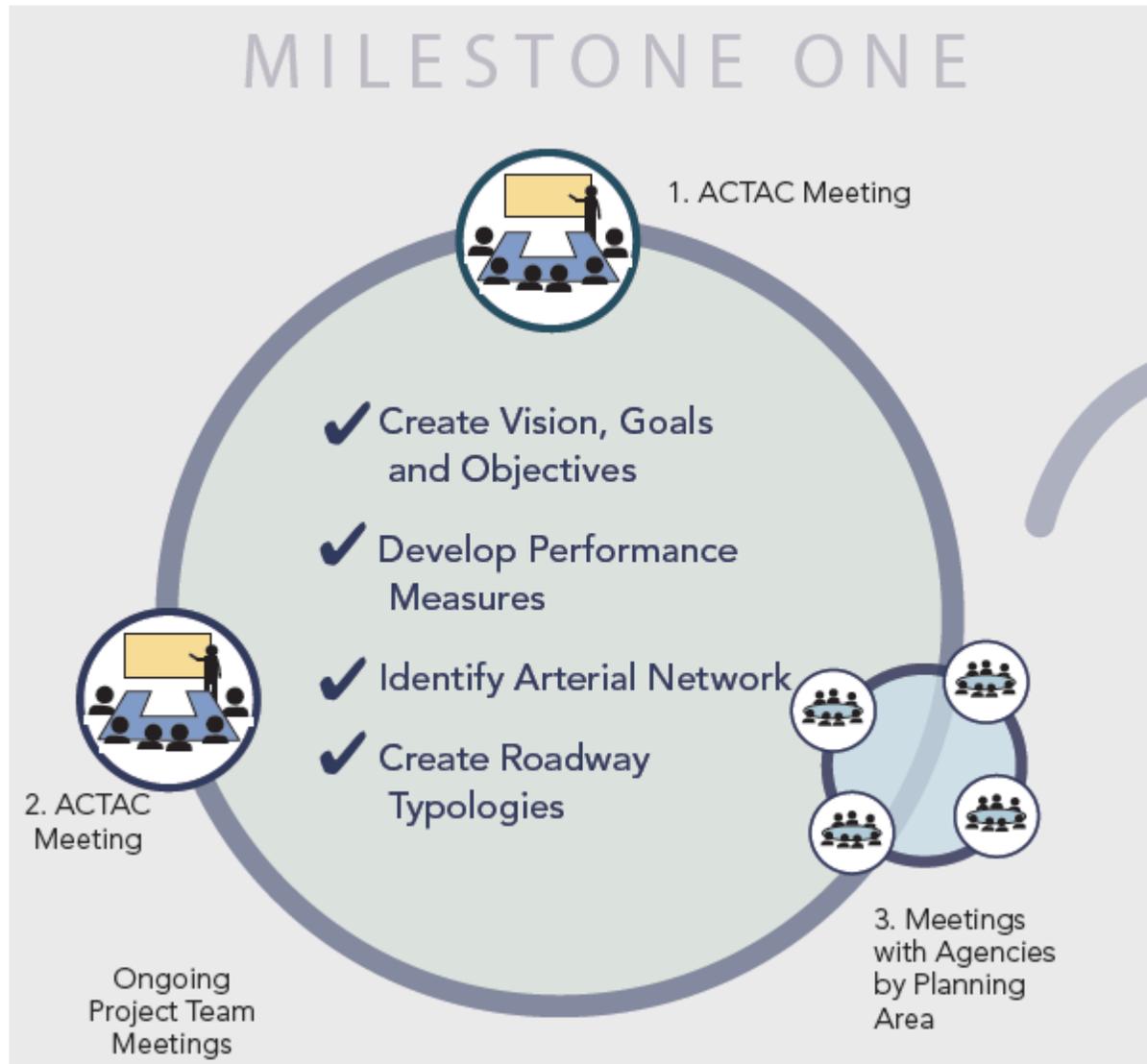
Scope Overview



Countywide Multimodal Arterial Plan

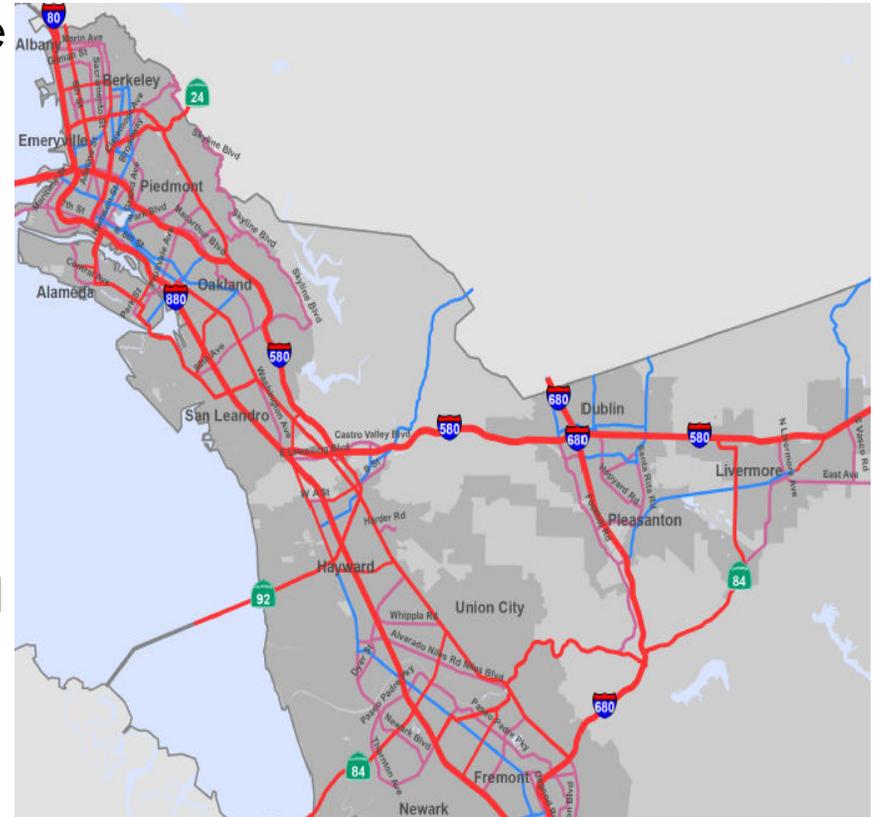


Summary Scope – Milestone # 1



Identifying Arterial Network

- Plan will screen ALL arterials in the County
- Stratification system for identifying Arterial Network
 - Cross-sectional improvements to be identified for the entire Arterial Network
 - Focused evaluation of short- and long-term improvements on arterials of Countywide significance



Identifying Roadway Typologies

- Typologies will be descriptive of:
 - Transportation function, modal emphasis
 - Relative scale of local or longer distance travel
 - Land use context
- Typologies will consider the potential for parallel facilities to create a complete street network
- Typologies will be consistent with priority goods movement and transit corridors



Potential Performance Measures

FACILITY-SPECIFIC QUANTITATIVE PERFORMANCE MEASURES:

| Auto | Transit | Pedestrian | Bicycle | Truck |
|------------------------------|----------------------------------|--------------------------------|-------------------------|---|
| Average Travel Speed | Based on Countywide Transit Plan | Level of Traffic Stress | Level of Traffic Stress | Based on Countywide Goods Movement Plan |
| Travel Reliability | | Pedestrian Crossing Assessment | | |
| Capital Cost Effectiveness | | | | |
| Operating Cost Effectiveness | | | | |

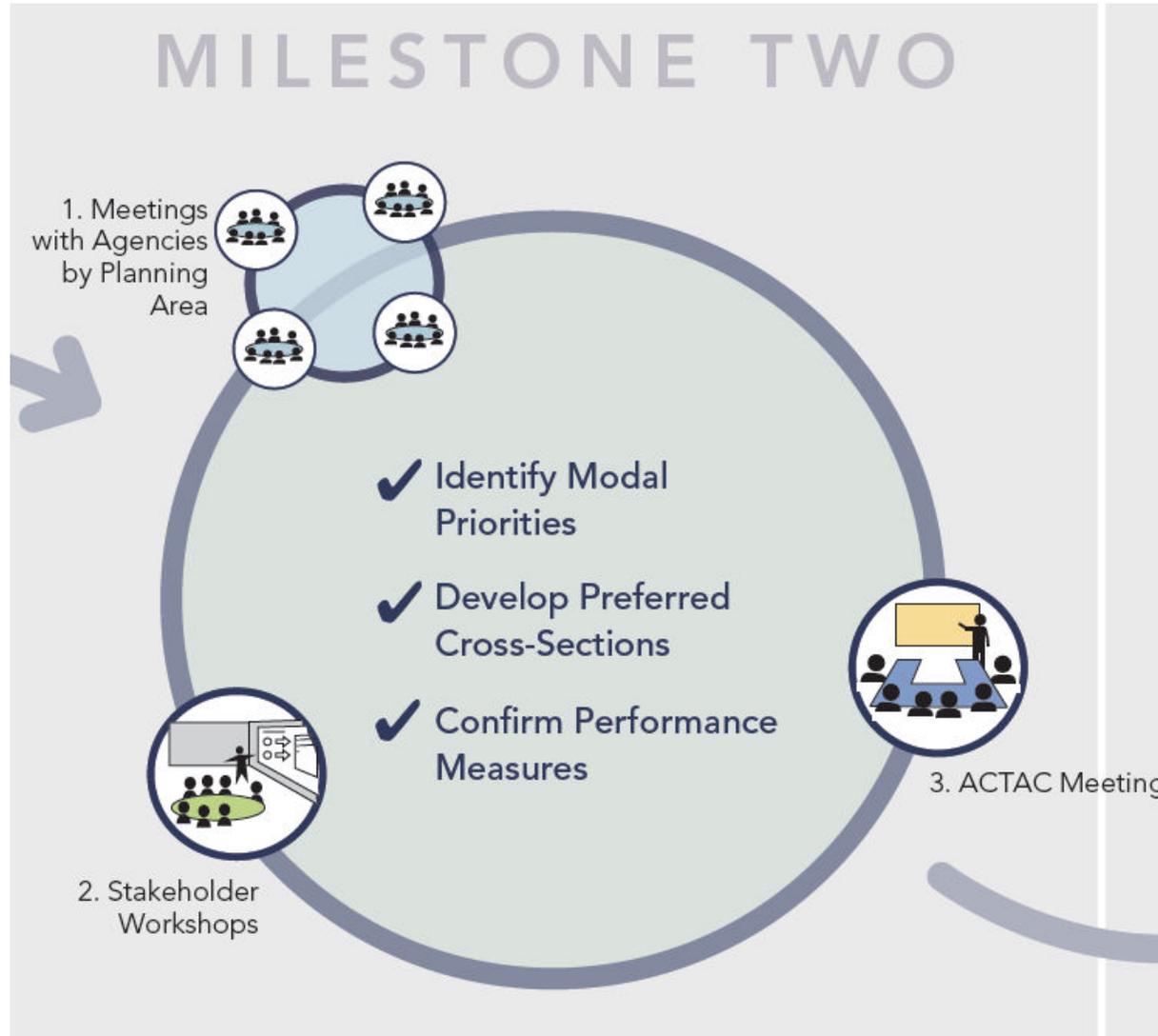
FACILITY-SPECIFIC QUALITATIVE MEASURES:

- Feasibility
- Opportunities for TOD
- Parking strategies
- Economic benefits

COUNTYWIDE AND SUB-AREA MEASURES:

- VMT/VMT per capita
- Active transportation mode share
- Social equity (investment and impacts of improvements)
- Adopted TDM Strategies

Summary Scope – Milestone #2



Forecasting Approach

Multiple Travel Demand Forecasting Scenarios:

1. Standard forecasts using the updated Alameda CTC Travel Demand Model with SCS land use
2. Alternative Scenario #1 – Behavioral Influence, reduced VMT
3. Alternative Scenario #2 – Technology influence, autonomous vehicles



Developing Preferred Cross-Sections

- The GIS Cross-Sectional Tool will utilize roadway typology, modal priorities, existing roadway cross-sections, and traffic forecasts to identify a set of recommended cross-sections for the Arterial Network
- Consultant team will coordinate with stakeholder agencies to develop the set of preferred cross-sections



Summary Scope – Milestone #3



Short- and Long-Term Improvements

Corridor Improvement Concepts

- Physical (cross-section, longitudinal, intersection)
- Transit and other modes
- Technology, systems, operations, other strategies

Support Programs

- Transportation Demand Management
- Parking
- Climate Initiative Programs

